

ABSTRACT

A cooling device for cooling a microelectronic complex including a plurality of
5 discrete functional modules. The cooling device includes a plurality of independent
cooling modules, each cooling module in a thermal exchange relationship with a
respective one of the plurality of discrete functional modules. During operation of the
microelectronic complex, a cooling requirement of each discrete functional module is
dynamically assessed, and the amount of cooling provided by each cooling module is
10 adjusted on the basis of the assessed cooling requirements. Thus, the discrete functional
modules are cooled independently from one another.